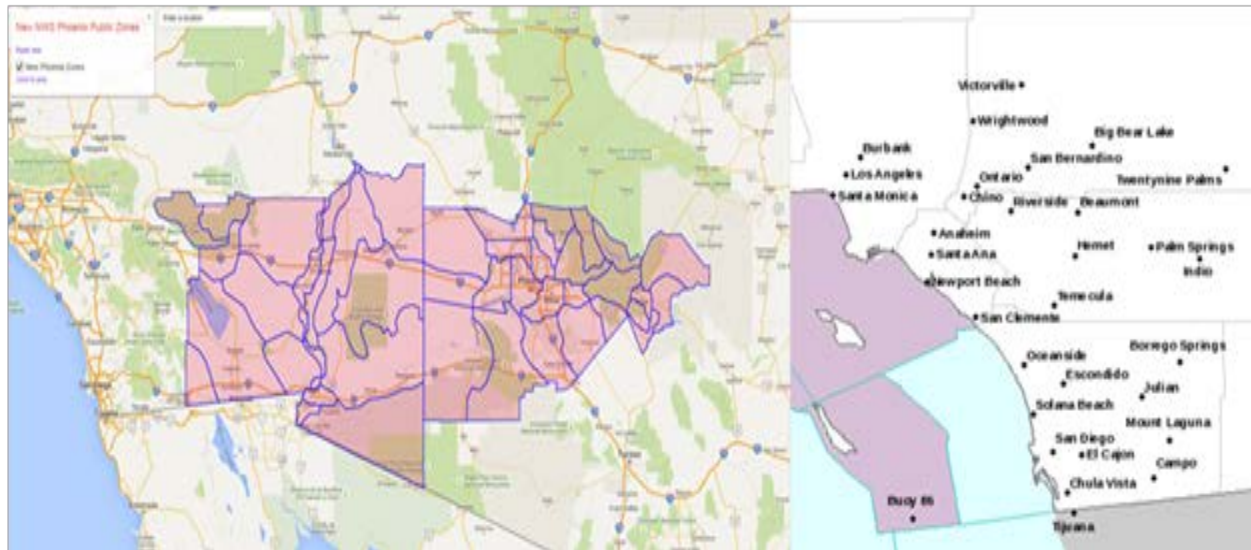


**Appendix A**  
**Public Notification that a potential event was occurring**  
**(40 CFR §50.14(c)(1))**

**FIGURE A-1**  
**NATIONAL WEATHER SERVICE PUBLIC ZONES**



**Fig A-1:** Illustrates the public zones serviced by the National Weather Service Office in Phoenix and San Diego. Imperial County, including southeast sections of Riverside County are part of the reporting public zone areas from the Phoenix office

The Appendix A Supplemental contains all the pertinent National Weather Service notices issued by either the San Diego or Phoenix office in date and time order.

## FIGURE A-2 WIND ADVISORY DECLARED FOR IMPERIAL COUNTY

### National Weather Service Raw Text Product

Displaying AFOS PIL: **NPWPSR** Received: 2016-03-10 08:49 UTC

← Previous in Time
View All KPSR Products for 10 Mar 2016

Next in Time →
Latest Product

View As Image

```

r
998
WAUS75 KPSR 100849
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
149 AM MST THU MAR 10 2016

...STRONG WESTERLY WINDS FOR FRIDAY AFTERNOON AND EVENING FOR
PORTIONS OF SOUTHEAST CALIFORNIA...

CAZ030-032-033-110000-
/O.NEW.KPSR.WT.Y.0003.160311T2200Z-160312T0600Z/
JOSHUA TREE NATIONAL PARK-RIVERSIDE COUNTY/EASTERN DESERTS-
IMPERIAL COUNTY-
INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...
LOST HORSE...CHIRIACO SUMMIT...DESERT CENTER...EAGLE MOUNTAIN...
BRANLEY...CALEXICO...EL CENTRO...GLAMIS...IMPERIAL...
THE SALTON SEA
1249 AM PST THU MAR 10 2016

...WIND ADVISORY IN EFFECT FROM 2 PM TO 10 PM PST FRIDAY...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A WIND
ADVISORY...WHICH IS IN EFFECT FROM 2 PM TO 10 PM PST FRIDAY.

* AFFECTED AREA...SOUTHEAST CALIFORNIA...INCLUDING THE IMPERIAL
VALLEY...INTERSTATE 8 EAST OF THE CALIFORNIA MOUNTAINS...AND
INTERSTATE 10 FROM JUST WEST OF BLYTHE TO THE COACHELLA VALLEY.

* TIMING...LATE FRIDAY AFTERNOON THROUGH FRIDAY EVENING.

* WINDS...SUSTAINED WEST WINDS OF 20 TO 30 MPH WITH GUSTS OVER 40
MPH.

* IMPACTS...DIFFICULT TRAVEL CONDITIONS DUE TO STRONG CROSSWINDS
ALONG NORTH-SOUTH ORIENTED ROADWAYS INCLUDING HIGHWAYS 78 AND 86 IN
SOUTHEAST CALIFORNIA. BLOWING DUST WILL ALSO REDUCE VISIBILITIES
AT TIMES...POTENTIALLY TO BELOW ONE MILE...ESPECIALLY ACROSS
IMPERIAL COUNTY IN SOUTHEAST CALIFORNIA IMPACTING TRAVEL ON
INTERSTATE 8.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.

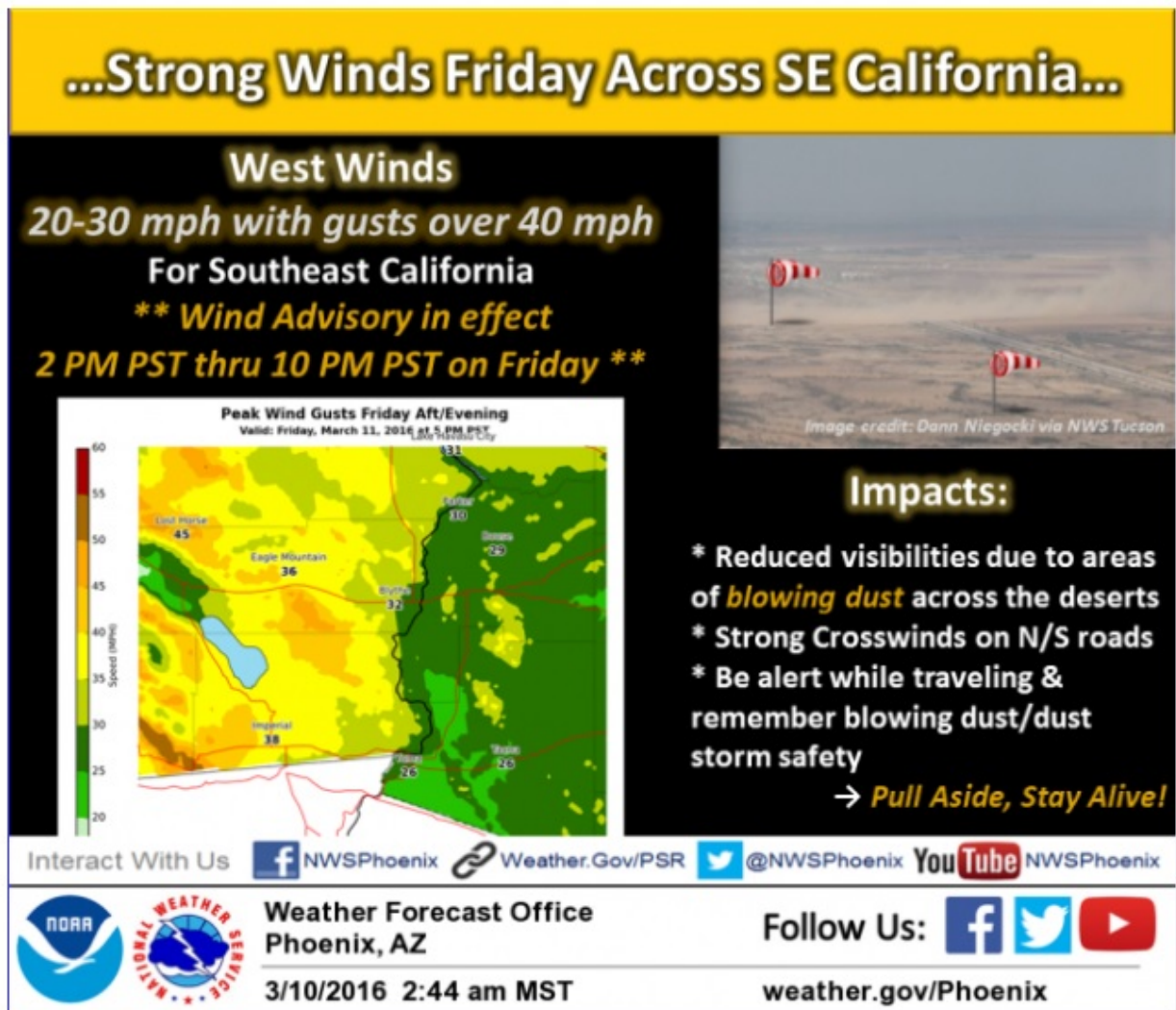
&&

$$

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**Fig A-2:** As early as 1:49 a.m. MST on March 10, 2016 the NWS Phoenix office issued a Wind Advisory for Imperial County and neighboring areas in anticipation of the vigorous weather system. Winds of 30 mph gusting to 40 mph were forecasted, along with blowing dust and sand. Source: Iowa Environmental Mesonet;  
<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201603100849>

**FIGURE A-3**  
**BLOWING DUST AND SAND EXPECTED IN SAN DIEGO DESERTS**



Gusty westerly winds will develop Friday afternoon with gusts over 40 mph in some locations across southeast California late in the afternoon and early evening. A Wind Advisory will be in effect from 2pm to 10pm Friday. Areas of restricted visibilities due to blowing dust are expected, especially along portions of the Interstate 8 and other dust prone travel corridors. Strong vehicle crosswinds may also impact travelers along area north/south roadways. Try and plan some extra travel time in to your day, be alert while traveling and remember the blowing dust/dust storm driving safety tip: Pull Aside, Stay Alive!

**Fig A-3:** A Weather Story issued by the NWS Phoenix office on March 10, 2016 and carried on the ICAPCD website advised the public that high winds and gusts would generate blowing dust on Friday, March 11, 2016

## FIGURE A-4 HIGH WINDS FOR SAN DIEGO DESERTS

### National Weather Service Raw Text Product

Displaying AFOS PIL: NPWSGX Received: 2016-03-11 04:01 UTC

◀ Previous in Time
View All KSGX Products for 11 Mar 2016

Next in Time ▶
Latest Product
View As Image

T  
 514  
 MMUS76 KSGX 110401  
 NPWSGX

URGENT - WEATHER MESSAGE  
 NATIONAL WEATHER SERVICE SAN DIEGO CA  
 801 PM PST THU MAR 10 2016

...GUSTY SOUTHWESTERLY WINDS IN PORTIONS OF THE MOUNTAINS AND  
 DESERTS LATE FRIDAY THROUGH EARLY SATURDAY...

.AN UPPER-LEVEL LOW PRESSURE TROUGH MOVING ACROSS THE REGION WILL  
 CREATE GUSTY SOUTHWESTERLY WINDS ACROSS PORTIONS OF THE MOUNTAINS  
 AND DESERTS LATE FRIDAY THROUGH EARLY SATURDAY. GUSTS OF 50 TO 60  
 MPH ARE EXPECTED THROUGH THE PERIOD. CONDITIONS WILL IMPROVE BY  
 LATE SATURDAY MORNING.

CAZ058-060062-065-111400-  
 /O.NEM.KSGX.WI.Y.0015.160312T0000Z-160312T1400Z/  
 SAN DIEGO COUNTY MOUNTAINS-APPLE AND LUCERNE VALLEYS-  
 COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-  
 SAN GORGONIO PASS NEAR BAHILING-  
 801 PM PST THU MAR 10 2016

...WIND ADVISORY IN EFFECT FROM 4 PM FRIDAY TO 6 AM PST  
 SATURDAY...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A WIND  
 ADVISORY...WHICH IS IN EFFECT FROM 4 PM FRIDAY TO 6 AM PST  
 SATURDAY.

- \* WINDS...SOUTHWEST 25 TO 35 MPH WITH GUSTS TO 60 MPH  
 FRIDAY AFTERNOON...BECOMING WEST TO SOUTHWEST FRIDAY NIGHT.
- \* TIMING...LATE FRIDAY AFTERNOON THROUGH EARLY SATURDAY MORNING.
- \* LOCATION...NEAR MOUNTAIN RIDGETOPS...ALONG DESERT MOUNTAIN  
 SLOPES...INTO ADJACENT DESERT AREAS.
- \* VISIBILITY...LOCALLY REDUCED IN BLOWING SAND AND BLOW DUST IN  
 THE DESERTS.
- \* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY FOR  
 MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR BROKEN TREE  
 LIMBS. IN THE DESERTS...AREAS OF BLOWING DUST AND SAND WILL  
 LOCALLY REDUCE VISIBILITY.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS  
 THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH  
 PROFILE VEHICLES. USE EXTRA CAUTION.

&&  
 \$\$  
 JJT

**Fig A-4:** Winds up to 35 mph with gusts reaching 60 mph were forecasted for the desert mountain slopes. The winds were expected to suspend copious amounts of dust. This area was immediately upstream of Imperial County. Source: Iowa Environmental Mesonet;

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWSGX&e=201603110401>

## FIGURE A-5

### APPROACHING SYSTEM TO PRODUCE WINDS AND BLOWING DUST & SAND

r  
 896  
 FXUS65 KPSR 110327  
 AFDPSR

AREA FORECAST DISCUSSION  
 NATIONAL WEATHER SERVICE PHOENIX AZ  
 830 PM MST THU MAR 10 2016

.SYNOPSIS...A MOSTLY DRY AND WARM PATTERN WILL CONTINUE INTO NEXT WEEK...HOWEVER ONE LOW PRESSURE SYSTEM WILL PASS THROUGH NORTHERN ARIZONA FRIDAY NIGHT INTO SATURDAY PROVIDING SOMEWHAT COOLER UNSETTLED WEATHER. THE BIGGEST IMPACT FROM THIS DISTURBANCE WILL BE WINDY CONDITIONS THROUGH SOUTHEAST CALIFORNIA PRODUCING LOCAL BLOWING SAND AND DUST FRIDAY NIGHT. VERY PLEASANT WEATHER CONDITIONS WILL RETURN TO THE REGION DURING THE FIRST HALF OF NEXT WEEK.

&&

.DISCUSSION...

VARIABLE HIGH CLOUDS WERE NOTED OVER OUR FORECAST AREA THIS EVENING...SOUTHEAST CA TO SOUTH CENTRAL AZ...AS A HIGH PRESSURE SYSTEM...ALTHOUGH WEAKENING...WILL CONTINUE OVERHEAD THROUGH FRIDAY MORNING.

AS DISCUSSED THE PAST FEW DAYS...AN ABRUPT CHANGE TO THE WEATHER PATTERN IS STILL FORECAST FOR LATE FRIDAY AFTERNOON THROUGH SATURDAY...AS A VIGOROUS PACIFIC DISTURBANCE MOVES THROUGH THE AREA. HIGH TEMPERATURES IN PHOENIX WILL FALL FROM A PRE-FRONTAL WARM 90 DEG FRI AFTN TO 74 SAT AFTN.

ALTHOUGH MOST OF THE MOISTURE AND STORM DYNAMICS FOR PRECIPITATION WILL BE CONFINED TO THE MOHAVE DESERT AND SOUTHERN NEVADA FRIDAY EVENING...AND ACROSS FAR NORTHERN ARIZONA LATE FRIDAY NIGHT AND SATURDAY MORNING...WINDY IMPACTS ARE EXPECTED IN OUR AREA. STRONG WINDS IN THE 35 TO 45 MPH RANGE ARE STILL SLATED FOR PORTIONS OF SOUTHEAST CA...ESPECIALLY THE IMPERIAL VALLEY...SALTON SEA...AND JOSHUA TREE NATIONAL PARK. A MIND ADVISORY FOR THE AREA IS POSTED FOR FRIDAY AFTERNOON. WINDS WILL SLOWLY DIMINISH AREA-WIDE FRIDAY NIGHT.

OTHERWISE CURRENT FORECASTS FOR FRIDAY AND SATURDAY LOOK GOOD. NO UPDATES PLANNED.

.PREVIOUS DISCUSSION...302 PM MST...

ANOTHER QUIET DAY WITH RIDGE AXIS STILL OVER OUR FORECAST AREA WITH NEARLY A CLOUD-FREE SKY EVERYWHERE. TEMPERATURES AT 2 PM WERE RUNNING ABOUT 5 TO 8 F AHEAD OF THIS TIME YESTERDAY.

FRIDAY INTO SATURDAY...A QUICK MOVING SHORT WAVE WILL CUT ACROSS NORTHERN ARIZONA. BIGGEST IMPACT WILL BE AN INCREASE IN WINDS. A MIND ADVISORY REMAINS IN PLACE FOR PORTIONS OF SOUTHEAST CALIFORNIA FRIDAY AFTERNOON AND EVENING. WIND FIELDS SHOULD RESPOND STRONGLY IN THE AFTERNOON AS COLD AIR ADVECTION GETS UNDERWAY. BUFR SOUNDINGS SUPPORT WINDS APPROACHING OR EXCEEDING 40 MPH IN THE IMPERIAL VALLEY AND THE I-10 CORRIDOR OF EASTERN RIVERSIDE COUNTY. WE'RE EXPECTING TO SEE SOME BLOWING SAND/DUST IN THAT AREA AS WELL. WARM AIR ADVECTION AHEAD OF THE FRONT SHOULD PUSH CENTRAL ARIZONA TOWARD THE 90 DEGREE MARK /WHILE SOME MINOR COOLING BEGINS IN SOUTHEAST CALIFORNIA/.

FRIDAY NIGHT THE SHORT WAVE MOVES THROUGH. STILL THE ISSUE OF NOT AN INCREDIBLE AMOUNT OF MOISTURE TO WORK WITH AND THE ISENTROPIC LIFT ISM/T VERY IMPRESSIVE. EVEN STILL...A SLIGHTLY FURTHER SOUTH TRAJECTORY AND A BOOST FROM OROGRAPHIC LIFT SHOULD GET A FEW LIGHT SHOWERS GOING EAST OF PHOENIX AROUND 12Z SATURDAY. THE SYSTEM WILL RAPIDLY MOVE EAST DURING THE DAY AND BY THE EARLY AFTERNOON HOURS MUCH DRIER AIR WILL BE FILTERING IN. THE MAXT DELTA FROM FRIDAY TO SATURDAY WILL RANGE FROM 5 TO 15 F.

ONCE THE QUICK MOVING SHORTWAVE EXITS INTO THE SOUTHERN PLAINS BY THE END OF THE WEEKEND...THE FORECAST AREA WILL REMAIN UNDER DRY ZONAL FLOW FOR AT LEAST THE FIRST HALF OF NEXT WEEK WITH HS HEIGHTS VERY STEADY IN A 568-574M RANGE. THE UPPER JET CORE WILL REMAIN THROUGH NORTHERN ARIZONA PLACING THE CWA WITHIN A GOOD SUBSIDENT WARMING REGIME PROMOTING DEEP MIXING AND TEMPERATURES 5-10F ABOVE NORMAL. FORECAST CONFIDENCE WAVES RATHER SUBSTANTIALLY TOWARDS THE LATTER HALF OF NEXT WEEK...WITH OPERATIONAL MODELS VASTLY DIVERGING

**Fig A-5:** An Area Forecast Discussion issued March 10, 2016 noted that the biggest impact from the approaching system would be gusty winds and blowing dust and sand across southeastern California during the night of March 11, 2016. Source: Iowa Environmental Mesonet;

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201603110330>



## FIGURE A-6

### WIND ADVISORY REMAINS IN EFFECT FOR IMPERIAL COUNTY

#### National Weather Service Raw Text Product

Displaying AFOS PIL: NPWPSR Received: 2016-03-11 08:48 UTC

⏮ Previous in Time
View All KPSR Products for 11 Mar 2016

Next in Time ⏭
Latest Product

View As Image

242  
 MAUS75 KPSR 110848  
 NPWPSR

URGENT - WEATHER MESSAGE  
 NATIONAL WEATHER SERVICE PHOENIX AZ  
 148 AM MST FRI MAR 11 2016

...STRONG WESTERLY WINDS THIS AFTERNOON AND EVENING FOR PORTIONS OF  
 SOUTHEAST CALIFORNIA...

CAZ030-032-033-112300-  
 /O.EXT.KPSR.WI.Y.0003.160311T2200Z-160312T0900Z/  
 JOSHUA TREE NATIONAL PARK-RIVERSIDE COUNTY/EASTERN DESERTS-  
 IMPERIAL COUNTY-  
 INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...  
 LOST HORSE...CHERIACO SUMMIT...DESERT CENTER...EAGLE MOUNTAIN...  
 BRAMLEY...CALEXICO...EL CENTRO...GLAMIS...IMPERIAL...  
 THE SALTON SEA  
 1248 AM PST FRI MAR 11 2016

...WIND ADVISORY NOW IN EFFECT FROM 2 PM THIS AFTERNOON TO 1 AM  
 PST SATURDAY...

\* AFFECTED AREA...SOUTHEAST CALIFORNIA...INCLUDING THE IMPERIAL  
 VALLEY...INTERSTATE 8 EAST OF THE CALIFORNIA MOUNTAINS...AND  
 INTERSTATE 10 FROM JUST WEST OF BLYTHE TO THE COACHELLA  
 VALLEY.

\* TIMING...LATE FRIDAY AFTERNOON THROUGH FRIDAY EVENING.

\* WINDS...SUSTAINED WEST WINDS OF 20 TO 30 MPH WITH GUSTS OVER  
 40 MPH.

\* VISIBILITIES...BLOWING DUST WILL ALSO REDUCE VISIBILITIES AT  
 TIMES...POTENTIALLY TO BELOW ONE MILE...ESPECIALLY ACROSS  
 IMPERIAL COUNTY IN SOUTHEAST CALIFORNIA IMPACTING TRAVEL ON  
 INTERSTATE 8. REGIONAL AND LONG-RANGE VISIBILITIES...INCLUDING  
 LOCATIONS ALONG AND JUST EAST OF THE COLORADO RIVER VALLEY...  
 WILL BE DEGRADED DUE TO THE LOFTED DUST AND SAND.

\* IMPACTS...DIFFICULT TRAVEL CONDITIONS DUE TO STRONG CROSSWINDS  
 ALONG NORTH-SOUTH ORIENTED ROADWAYS INCLUDING HIGHWAYS 78 AND  
 86 IN SOUTHEAST CALIFORNIA.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN  
 30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND  
 58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY  
 FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT  
 AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER  
 A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA  
 CAUTION.

&&  
 \$\$

**Fig A-6:** At 1:48 a.m. MST on March 11, 2016 the NWS Phoenix office issued a Wind Advisory for Imperial County and neighboring areas in anticipation of the vigorous weather system. Winds of 30 mph gusting to 40 mph were forecasted, along with blowing dust and sand. Source: Iowa Environmental Mesonet;

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201603110848>

## FIGURE A-7

### AREA FORECAST DISCUSSION – BLOWING SAND & DUST FOR IMPERIAL COUNTY

F  
102  
FXUS65 KPSR 110932  
AFDPSR

AREA FORECAST DISCUSSION  
NATIONAL WEATHER SERVICE PHOENIX AZ  
230 AM MST FRI MAR 11 2016

.SYNOPSIS...  
A MOSTLY DRY AND WARM PATTERN WILL CONTINUE INTO NEXT WEEK...HOWEVER ONE LOW PRESSURE SYSTEM WILL PASS THROUGH NORTHERN ARIZONA FRIDAY NIGHT INTO SATURDAY PROVIDING SOMEWHAT COOLER UNSETTLED WEATHER. THE BIGGEST IMPACT FROM THIS DISTURBANCE WILL BE WINDY CONDITIONS ACROSS SOUTHEAST CALIFORNIA PRODUCING LOCAL BLOWING SAND AND DUST FRIDAY NIGHT. VERY PLEASANT WEATHER CONDITIONS WILL RETURN TO THE REGION DURING THE FIRST HALF OF NEXT WEEK.

88

.DISCUSSION...  
A COMPACT AND WELL DEFINED PV ANOMALY NEAR 32N 133W WAS RAPIDLY MOVING TOWARDS THE CNTRL/SRN CALIFORNIA COAST THIS MORNING IN CONJUNCTION WITH A ROBUST 140KT JET STREAK. DOWNSTREAM THROUGH THE SRN CONUS...SHORTWAVE RIDGING WILL TEMPORARILY HOLD THROUGH THIS AFTERNOON WITH 00Z HEIGHTS AND TEMPERATURES ALOFT SAMPLED NEAR THE 90TH PERCENTILE. WHILE THIN CIRRUS WILL GENERALLY INCREASE AS HEIGHTS BEGIN TO FALL THROUGH SRN CALIFORNIA...EFFICIENTLY DEEP MECHANICAL MIXING AND THE UNSEASONABLY WARM ATMOSPHERIC COLUMN WILL PROVIDE ANOTHER DAY OF MUCH WARMER THAN NORMAL TEMPERATURES.

BEST PERFORMING GLOBAL MODELS AND CORRESPONDING HIGH RESOLUTION OUTPUT REMAINS QUITE CONSISTENT IN PROPAGATING THE MAIN VORTICITY CENTER AND COLD CORE FROM SRN CALIFORNIA THROUGH NORTHERN ARIZONA AND NEW MEXICO FRIDAY NIGHT AND SATURDAY. UNFORTUNATELY DESPITE A RATHER STEEP LOW LEVEL FRONT AND ATTENDANT FRONTOGENETICAL FORCING...DEEPER DYNAMICAL ASCENT AND BETTER QUALITY MOISTURE PROFILES REMAIN WELL NORTH OF THE FORECAST AREA. ASIDE FROM DECAYING SHOWERS SPILLING OVER THE COASTAL CALIFORNIA MOUNTAINS...THE ONLY LEGITIMATE HOPE FOR PRECIPITATION WILL BE THROUGH SRN GILA COUNTY WHERE THE FRONTAL BOUNDARY AND OROGRAPHIC INFLUENCE MAY BE CAPABLE OF SQUEEZING OUT A FEW VERY LIGHT SHOWERS (EMPHASIS ON VERY LIGHT).

OTHERWISE...THE PRIMARY WEATHER HAZARD WILL BE STRONG WINDS DEVELOPING IMMEDIATELY ALONG AND BEHIND THE FRONTAL BOUNDARY THROUGH SOUTHEAST CALIFORNIA IN A REGION OF DEEPENING CAA AND TIGHTENING PRESSURE GRADIENT LATER TODAY. MODEL FORECAST SOUNDING DATA HAS WAVERED VERY LITTLE IN RECENT ITERATIONS...STILL SUGGESTING STRONG DOWNWARD POST FRONTAL MOMENTUM TRANSFER ACTING AS A TRAPPED DENSITY CURRENT IN THE LEE OF THE SAN DIEGO AND RIVERSIDE COUNTY HIGHER TERRAIN. A WELL MIXED BOUNDARY LAYER WILL BE MAINTAINED INTO THE EVENING HOURS TAPPING A 40+KT LLJ STREAMING TOWARDS THE SEC FROM A 2500FT LEVEL. MOST RECENT MODEL OUTPUT NOW SUGGESTS ONSET OF THIS PHENOMENA POSSIBLY DELAYED A BIT...BUT ALSO PUSHED LATER INTO THE EVENING AND HAVE CORRESPONDINGLY EXTENDED THE ADVISORY TIMING BACK A FEW HOURS.

THIS SHORTWAVE WILL QUICKLY EXIT INTO THE SOUTHERN PLAINS BY SUNDAY MORNING LEAVING THE FORECAST AREA UNDER DRY ZONAL FLOW FOR AT LEAST THE FIRST HALF OF NEXT WEEK. HS HEIGHTS WILL REMAIN VERY STEADY IN A 570-576DM RANGE WITH BOUNDARY LAYER THERMAL PROFILES GRADUALLY WARMING. THE UPPER JET CORE WILL REMAIN SITUATED ACROSS THE GREAT BASIN PLACING THE CAA WITHIN A GOOD SUBSIDENT WARMING REGIME PROMOTING DEEP MIXING AND TEMPERATURES 5-10F ABOVE NORMAL. MODEL SPREAD HAS BEEN NARROWING IN THE PAST COUPLE RUNS...AND HAVE GENERALLY PUSHED FORECAST TEMPERATURES TOWARDS THE 50TH-75TH PERCENTILE OF THE MODEL SPECTRUM.

LATEST MEDIUM RANGE OPERATIONAL MODELS ARE DISPLAYING LESS SPREAD FOR LATER IN THE WEEK PLACING PRIMARY NEGATIVE HEIGHT ANOMALIES OVER THE NORTHERN PLAINS/UPPER MIDWEST/GREAT LAKES WITH UPSTREAM HIGH AMPLITUDE RIDGING ALONG THE NORTHERN AMERICAN WEST COAST. HOWEVER...NAEFS ENSEMBLE MEMBERS STILL EXHIBIT NOTABLE SPREAD WITH SEVERAL MEMBERS STILL RETROGRADING ENERGY TOWARDS THE SOUTHWEST IN THE FORM OF AN OMEGA TYPE BLOCKING PATTERN. GIVEN THE TREND IN OPERATIONAL MEMBERS AND FEWER ENSEMBLES SUPPORTING LOWER HEIGHTS OVER THE FORECAST AREA...WITH MODERATE CONFIDENCE HAVE TRENDED THE FORECAST TOWARDS THE WARMER AND DRIER OUTCOME FOR THE LATTER HALF OF THE WEEK.

**Fig A-7:** An Area Forecast Discussion forecasted that blowing dust and san would result from the weather system moving through southeastern California. Source: Iowa Environmental Mesonet;

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201603110930>

## FIGURE A-8

### BLOWING DUST AND SAND EXPECTED IN SAN DIEGO DESERTS – PAGE 1

7  
 718  
 MMUS76 KSGX 111222  
 NPMSGX

URGENT - WEATHER MESSAGE  
 NATIONAL WEATHER SERVICE SAN DIEGO CA  
 422 AM PST FRI MAR 11 2016

...GUSTY WINDS ACROSS MUCH OF Socal FROM LATE THIS AFTERNOON  
 THROUGH EARLY SATURDAY MORNING...

.A FAST-MOVING COLD FRONT AND VIGOROUS UPPER-LEVEL LOW PRESSURE  
 SYSTEM WILL BRING GUSTY SOUTHWEST TO WESTERLY WINDS ACROSS  
 PORTIONS OF THE REGION. GUSTS OF 30 TO 40 MPH WILL BE LIKELY FOR  
 PORTIONS OF THE COAST AND VALLEYS. GUSTS OF 50 TO 60 MPH WILL BE  
 LIKELY FOR THE MOUNTAINS AND DESERT SLOPES. CONDITIONS WILL  
 IMPROVE BY LATE SATURDAY MORNING.

CAZ043-048-050-057-552-554-112200-  
 /O.EBX.KSGX.WI.Y.0015.160312T0000Z-160312T1200Z/  
 SAN DIEGO COUNTY COASTAL AREAS-  
 SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-  
 SAN DIEGO COUNTY VALLEYS-SANTA ANA MOUNTAINS AND FOOTHILLS-  
 ORANGE COUNTY COASTAL AREAS-ORANGE COUNTY INLAND AREAS-  
 422 AM PST FRI MAR 11 2016

...WIND ADVISORY IN EFFECT FROM 4 PM THIS AFTERNOON TO 4 AM PST  
 SATURDAY...

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A WIND  
 ADVISORY...WHICH IS IN EFFECT FROM 4 PM THIS AFTERNOON TO 4 AM  
 PST SATURDAY.

- \* WINDS...SOUTHWEST 15 TO 25 MPH WITH GUSTS TO 35 MPH THIS  
 AFTERNOON...BECOMING WEST THIS EVENING WITH GUSTS UP TO 40 MPH.
- \* TIMING...STRONGEST WINDS WILL BE LATE AFTERNOON THROUGH MID  
 EVENING...ROUGHLY BETWEEN 5 PM TO 10 PM. WINDS DIMINISHING SATURDAY  
 MORNING.
- \* LOCATION...STRONGEST WIND GUSTS AT THE IMMEDIATE COAST AND ALONG  
 THE COASTAL SLOPES AND FOOTHILLS.
- \* IMPACTS...THE WINDS WILL MAKE DRIVING DIFFICULT...ESPECIALLY FOR  
 MOTORISTS WITH HIGH PROFILE VEHICLES. WATCH FOR DOWNED BRANCHES  
 AND PALM FRONDS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT WINDS OF 35 MPH ARE EXPECTED. WINDS  
 THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY FOR HIGH  
 PROFILE VEHICLES. USE EXTRA CAUTION.

&&  
 \$\$

CAZ058-060-062-065-112200-  
 /O.CON.KSGX.WI.Y.0015.160312T0000Z-160312T1400Z/  
 SAN DIEGO COUNTY MOUNTAINS-APPLE AND LUCERNE VALLEYS-  
 COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-  
 SAN GORGONIO PASS NEAR BANNING-  
 422 AM PST FRI MAR 11 2016

...WIND ADVISORY REMAINS IN EFFECT FROM 4 PM THIS AFTERNOON TO  
 6 AM PST SATURDAY...

- \* WINDS...SOUTHWEST 25 TO 35 MPH WITH GUSTS UP TO 60 MPH THIS  
 AFTERNOON...BECOMING WESTERLY OVERNIGHT.
- \* TIMING...STRONGEST WINDS LATE THIS AFTERNOON THROUGH MID  
 EVENING. WINDS DIMINISHING SATURDAY MORNING.
- \* LOCATION...STRONGEST WINDS NEAR MOUNTAIN RIDGETOPS...ALONG  
 DESERT MOUNTAIN SLOPES...INTO ADJACENT DESERT AREAS.
- \* VISIBILITY...BLOWING DUST AND SAND IN THE DESERTS COULD BRIEFLY  
 REDUCE VISIBILITY TO BELOW ONE MILE.



**FIGURE A-8**  
**BLOWING DUST AND SAND EXPECTED IN SAN DIEGO DESERTS – PAGE 2**

**Fig A-8:** This Urgent Weather Message issued at 4:22 a.m. Friday, March 11, 2016 re-emphasized the that gusts up to 60 mph along desert sloes could drastically limit visibility due to blowing dust and sand. Source: Iowa Environmental Mesonet;  
<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWSGX&e=201603111222>

## FIGURE A-9 HIGH WINDS FOR SAN DIEGO DESERTS – PAGE 1

\$\$

CAZ065-120715-  
SAN GORGONIO PASS NEAR BANNING-  
814 AM PST FRI MAR 11 2016

...WIND ADVISORY IN EFFECT FROM 4 PM THIS AFTERNOON TO 6 AM PST  
SATURDAY...

.TODAY...PARTLY CLOUDY. HIGHS 75 TO 80. AREAS OF WINDS WEST 15 TO 25 MPH WITH GUSTS TO 35 MPH...BECOMING 25 TO 30 MPH WITH GUSTS TO 55 MPH IN THE AFTERNOON.  
.TONIGHT...PARTLY CLOUDY WITH A CHANCE OF RAIN. COOLER. LOMS 46 TO 54. AREAS OF WINDS WEST 30 TO 40 MPH WITH GUSTS TO 60 MPH. CHANCE OF MEASURABLE PRECIPITATION 50 PERCENT.  
.SATURDAY...PARTLY CLOUDY IN THE MORNING...BECOMING MOSTLY SUNNY. AREAS OF BLOWING SAND AND BLOWING DUST IN THE MORNING. LOCAL VISIBILITY ONE QUARTER MILE OR LESS AT TIMES IN THE MORNING. HIGHS 69 TO 74. AREAS OF WINDS WEST 25 TO 35 MPH...BECOMING 15 TO 25 MPH IN THE AFTERNOON. GUSTS TO 40 MPH.  
.SATURDAY NIGHT...MOSTLY CLEAR. LOMS 46 TO 56. AREAS OF WINDS WEST 20 TO 30 MPH. GUSTS TO 50 MPH...BECOMING 45 MPH OVERNIGHT.  
.SUNDAY...PARTLY CLOUDY. HIGHS 71 TO 76. AREAS OF WINDS WEST 15 TO 25 MPH WITH GUSTS TO 35 MPH.  
.SUNDAY NIGHT...PARTLY CLOUDY. SLIGHT CHANCE OF SHOWERS OVERNIGHT. WINDY. LOMS 51 TO 59.  
.MONDAY...PARTLY CLOUDY WITH A SLIGHT CHANCE OF SHOWERS. VERY WINDY. HIGHS 73 TO 78.  
.MONDAY NIGHT...PARTLY CLOUDY. SLIGHT CHANCE OF SHOWERS IN THE EVENING. LOMS 50 TO 59.  
.TUESDAY...PARTLY CLOUDY IN THE MORNING...BECOMING MOSTLY SUNNY. HIGHS 78 TO 83.  
.TUESDAY NIGHT...MOSTLY CLEAR. LOMS 56 TO 62.  
.WEDNESDAY...MOSTLY SUNNY. HIGHS 80 TO 85.  
.WEDNESDAY NIGHT...MOSTLY CLEAR. LOMS 56 TO 62.  
.THURSDAY...MOSTLY SUNNY. HIGHS 81 TO 86.

\$\$

CAZ061-120715-  
COACHELLA VALLEY-  
814 AM PST FRI MAR 11 2016

...WIND ADVISORY IN EFFECT FROM 4 PM THIS AFTERNOON TO 6 AM PST  
SATURDAY...

.TODAY...PARTLY CLOUDY. HIGHS AROUND 82. LIGHT WINDS BECOMING WEST 20 TO 30 MPH WITH GUSTS TO 40 MPH IN THE AFTERNOON.  
.TONIGHT...PARTLY CLOUDY. AREAS OF BLOWING SAND AND BLOWING DUST IN THE EVENING. CHANCE OF RAIN IN THE EVENING...THEN SLIGHT CHANCE OF RAIN OVERNIGHT. COOLER. LOMS 46 TO 54. AREAS OF WINDS NORTHWEST 15 TO 25 MPH WITH GUSTS TO 40 MPH. CHANCE OF MEASURABLE PRECIPITATION 50 PERCENT.  
.SATURDAY...PARTLY CLOUDY IN THE MORNING...BECOMING MOSTLY SUNNY. HIGHS AROUND 77. AREAS OF WINDS NORTH 15 TO 20 MPH WITH GUSTS TO 30 MPH IN THE MORNING BECOMING LIGHT.  
.SATURDAY NIGHT...MOSTLY CLEAR. LOMS 45 TO 55. AREAS OF WINDS NORTHWEST 15 TO 20 MPH WITH GUSTS TO 30 MPH.  
.SUNDAY...MOSTLY SUNNY. HIGHS AROUND 79. AREAS OF WINDS NORTHWEST 15 MPH WITH GUSTS TO 25 MPH IN THE MORNING BECOMING LIGHT.  
.SUNDAY NIGHT...MOSTLY CLEAR IN THE EVENING...THEN PARTLY CLOUDY WITH A SLIGHT CHANCE OF SHOWERS OVERNIGHT. BREEZY. LOMS 49 TO 58.  
.MONDAY...PARTLY CLOUDY IN THE MORNING...BECOMING MOSTLY SUNNY. SLIGHT CHANCE OF SHOWERS. WINDY. HIGHS AROUND 81.  
.MONDAY NIGHT...MOSTLY CLEAR WITH A SLIGHT CHANCE OF SHOWERS IN THE EVENING...THEN PARTLY CLOUDY OVERNIGHT. LOMS 50 TO 58.  
.TUESDAY...PARTLY CLOUDY IN THE MORNING...BECOMING MOSTLY SUNNY. HIGHS AROUND 84.  
.TUESDAY NIGHT...MOSTLY CLEAR. LOMS 50 TO 60.  
.WEDNESDAY...MOSTLY SUNNY. HIGHS 84 TO 89.  
.WEDNESDAY NIGHT...MOSTLY CLEAR. LOMS 50 TO 60.  
.THURSDAY...MOSTLY SUNNY. HIGHS 85 TO 90.

\$\$

CAZ062-120715-  
SAN DIEGO COUNTY DESERTS-  
814 AM PST FRI MAR 11 2016

...WIND ADVISORY IN EFFECT FROM 4 PM THIS AFTERNOON TO 6 AM PST

**FIGURE A-9**  
**HIGH WINDS FOR SAN DIEGO DESERTS – PAGE 2**

**Fig A-9:** High winds were expected for the San Diego deserts along with blowing dust and sand. This area was immediately upstream of Imperial County. Source: Iowa Environmental Mesonet;  
<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=ZFPSGX&e=201603111614>

## FIGURE A-10 WIND ADVISORY EXTENDED FOR IMPERIAL COUNTY

### National Weather Service Raw Text Product

Displaying AFOS PIL: NPWPSR Received: 2016-03-11 22:01 UTC

← Previous in Time
View All KPSR Products for 11 Mar 2016

Next in Time →
Latest Product
View As Image

```

r
468
WAUS75 KPSR 112201
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
301 PM MST FRI MAR 11 2016

...STRONG WESTERLY WINDS THIS AFTERNOON AND EVENING FOR PORTIONS
OF SOUTHEAST CALIFORNIA...

CAZ030-032-033-120900-
/O.CON.KPSR.WI.Y.0003.0000000000Z-160312T0900Z/
JOSHUA TREE NATIONAL PARK-RIVERSIDE COUNTY/EASTERN DESERTS-
IMPERIAL COUNTY-
INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...
LOST HORSE...CHIRIACO SUMMIT...DESERT CENTER...EAGLE MOUNTAIN...
BRAMLEY...CALEXICO...EL CENTRO...GLAMIS...IMPERIAL...
THE SALTON SEA
201 PM PST FRI MAR 11 2016

...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PST SATURDAY...

* AFFECTED AREA...SOUTHEAST CALIFORNIA...INCLUDING THE IMPERIAL
VALLEY...INTERSTATE 8 EAST OF THE CALIFORNIA MOUNTAINS...AND
INTERSTATE 10 FROM JUST WEST OF BLYTHE TO THE COACHELLA
VALLEY.

* TIMING...LATE FRIDAY AFTERNOON THROUGH FRIDAY EVENING.

* WINDS...SUSTAINED WEST WINDS OF 20 TO 30 MPH WITH GUSTS OVER
40 MPH.

* VISIBILITIES...BLOWING DUST WILL ALSO REDUCE VISIBILITIES AT
TIMES...POTENTIALLY TO BELOW ONE MILE...ESPECIALLY ACROSS
IMPERIAL COUNTY IN SOUTHEAST CALIFORNIA IMPACTING TRAVEL ON
INTERSTATE 8. REGIONAL AND LONG-RANGE VISIBILITIES...INCLUDING
LOCATIONS ALONG AND JUST EAST OF THE COLORADO RIVER VALLEY...
WILL BE DEGRADED DUE TO THE LOFTED DUST AND SAND.

* IMPACTS...DIFFICULT TRAVEL CONDITIONS DUE TO STRONG CROSSWINDS
ALONG NORTH-SOUTH ORIENTED ROADWAYS INCLUDING HIGHWAYS 78 AND
86 IN SOUTHEAST CALIFORNIA.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.

&&

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**Fig A-10:** The weather system was so strong that at 3:01 p.m. MST the NWS extended the Wind Advisory for southeastern California through 1 p.m. PST Saturday, March 12, 2016. Source: Iowa Environmental Mesonet;  
<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201603112201>

## FIGURE A-11

### HIGH WINDS PUMMELING SOUTHEAST CALIFORNIA AND IMPERIAL COUNTY

F  
 068  
 FXUS65 KPSR 120307  
 AFDPSR

AREA FORECAST DISCUSSION  
 NATIONAL WEATHER SERVICE PHOENIX AZ  
 810 PM MST FRI MAR 11 2016

.SYNOPSIS...  
 MOSTLY DRY AND WARM CONDITIONS WILL CONTINUE INTO NEXT WEEK...HOWEVER  
 ONE LOW PRESSURE SYSTEM WILL PASS THROUGH NORTHERN ARIZONA TONIGHT  
 AND SATURDAY PROVIDING SOMEWHAT COOLER UNSETTLED WEATHER. THE  
 BIGGEST IMPACT FROM THIS DISTURBANCE WILL BE WINDY CONDITIONS ACROSS  
 SOUTHEAST CALIFORNIA PRODUCING LOCAL BLOWING SAND AND DUST TONIGHT.  
 VERY PLEASANT WEATHER CONDITIONS WILL RETURN TO THE REGION DURING THE  
 FIRST HALF OF NEXT WEEK.

..  
 .DISCUSSION...A FAST MOVING PACIFIC COLD FRONT MOVED ASHORE LATE  
 FRIDAY AFTERNOON AND EVENING. THE MOST INTENSE PART OF THIS SYSTEM  
 FOR PRECIP/TSTM WAS ALONG THE COAST FROM SANTA BARBARA TO SAN DIEGO  
 LATE IN THE DAY...SHIFTING TO BETWEEN LAS VEGAS AND KINGMAN BY 11  
 PM...THEN ACROSS THE GRAND CANYON AND FLAGSTAFF JUST BEFORE SUNRISE  
 SAT. ACROSS OUR FORECAST AREA...WHICH IS MOST OF THE SOUTHEAST CA  
 MOUNTAINS AND DESERTS...THE AREA WAS PUMMELED BY STRONG WIND GUSTS.  
 SAMPLING OF THE AREA JUST BEFORE 7 PM MST SHOWED THE STRONGEST GUSTS  
 OCCURRED IN THE IMPERIAL VALLEY...THE SALTON SEA...AND OVER THE  
 MOUNTAINS OF JOSHUA TREE NATIONAL PARK...AREAS WHERE A WIND ADVISORY  
 IS IN EFFECT UNTIL 1 AM MST. (PEAK GUSTS UP TO 7 PM MST WERE AT  
 MOUNTAIN SPRINGS (ALONG I-8 W OF EL CENTRO) 47 MPH...THE IMPERIAL  
 AIRPORT 45 MPH...AND JOSHUA TREE NATIONAL PARK 44 MPH.

WEATHER RADAR 8 PM SHOWED PERHAPS A FEW SPRINKLES IN JOSHUA TREE  
 NATIONAL PARK AREA AS CLOUDINESS SPILLS OVER THE COASTAL RANGE...  
 AND DIRECTLY DOWNSTREAM FROM THE BANNING PASS. NOTHING MORE THAN A  
 FEW SPRINKLES ARE EXPECTED OVERNIGHT.

AS THE COLD FRONT MOVES EAST...EXPECTING TO PASS THROUGH PHOENIX  
 BETWEEN 1 AND 3 AM...IT WILL REMAIN BREEZY FROM THE WEST ACROSS MOST  
 AREAS OVERNIGHT. LIGHTER WIND IS EXPECTED BY SATURDAY AFTERNOON IN  
 THE WAKE OF THE PACIFIC SYSTEM WHICH IS FORECAST OVER FAR NORTHWEST  
 NEW MEXICO BY 11 AM SATURDAY.

OTHERWISE NO WEATHER SURPRISES EXPECTED TONIGHT AND SATURDAY.  
 THE CURRENT DRY AND COOLER FORECASTS FOR THE WEEKEND LOOK OK. NO  
 SHORT TERM UPDATES NEEDED.

.PREVIOUS DISCUSSION...227 PM MST...

CLOUD COVER HAS FILLED IN ACROSS THE REGION DURING THE DAY...FIRST  
 INTRUDING AT THE HIGHER LEVELS AND SLOWLY FILLING DOWN INTO THE  
 LOWER ATMOSPHERIC LAYERS. CEILINGS (BKN TO OVC CONDITIONS) NOT QUITE  
 OBSERVED YET BELOW 20KFT AROUND THE AREA. CLOUD COVERAGE IS BECOMING  
 THICK AND LOW ENOUGH TO BE SAMPLED BY RADARS AROUND AZ...HOWEVER NO  
 ACTUAL SHOWER ECHOES HAVE DEVELOPED OVER THE STATE. RAIN BANDS ARE  
 STREAMING THROUGH THE L.A. BASIN WITH MARINE-LAYER ENHANCED STRATUS  
 BANKING UP OVER THE PENINSULAR RANGES WHERE THE BEST CHANCES FOR  
 RAINFALL RESIDE TODAY. MAIN UPPER PV ANOMALY/LOW CIRC IS GENERALLY  
 WEST OF THE BAY AREA AND WILL QUICKLY DROP INTO CENTRAL/SO CAL TONIGHT  
 AND MOVE ACROSS NORTHERN AZ SATURDAY.

BEFORE THE CIRC CENTER AND ASSOCIATED COLD FRONT MOVE IN...STRONG  
 PRE-FRONTAL AND GRADIENT LL JET WINDS WILL DEVELOP INTO THE AREA. A  
 WIND ADVISORY IS OUT FOR THE SOUTHEAST CA DESERTS...WHERE GUSTS OF AT  
 LEAST 40 MPH ARE POSSIBLE. WINDS WON'T BE QUITE AS STRONG ACROSS  
 SOUTH-CENTRAL AZ WITH GUSTS OF 20-25 MPH. TEMPERATURE FORECAST FOR  
 TODAY WAS A BIT MORE CHALLENGING THAN EARLIER THOUGHT...WITH THE  
 CLOUD SHIELD INHIBITING SOLAR HEATING BUT MUCH WARMER BL/ML  
 TEMPERATURES COMPARED TO THIS TIME YESTERDAY...PER ACARS/MDCRS  
 SOUNDINGS. HUGGED HIGH TEMPS DOWN TWO TO THREE DEGREES FROM THE  
 EARLIER FORECAST AS A RESULT.

850-500MB THETA-E PACKING/FRONTAL ANALYSIS TRACKS THE COLD FRONT  
 INTO SOUTHEAST CA AROUND 12/04Z...AT THE CO RIVER VALLEY APPROX  
 12/06Z AND INTO SOUTH-CENTRAL AZ AROUND 12/09Z...PERSISTING WESTERLY  
 WIND AND CONTINUED MOMENTUM TRANSFER OVERNIGHT. UNFORTUNATELY  
 DESPITE THE STEEP LOW LEVEL FRONT AND FORCING...DEEPER DYNAMICAL

**Fig A-11:** An Area Forecast Discussion noted that a wide region was being pummeled by high winds and that Imperial County was experiencing the strongest winds. Source: Iowa Environmental Mesonet;

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=AFDPSR&e=201603120310>



**FIGURE A-12**  
**ZONE FORECAST FOR IMPERIAL COUNTY INCLUDED BLOWING DUST & SAND – PAGE 1**

10 TO 20 MPH. GUSTS UP TO 30 MPH.  
.SATURDAY...PARTLY SUNNY IN THE MORNING...THEN BECOMING SUNNY. MUCH COOLER. HIGHS 68 TO 73. WEST WIND 5 TO 15 MPH.  
.SATURDAY NIGHT...CLEAR AND COLDER. LOMS 39 TO 49. SOUTHWEST WIND 10 TO 15 MPH IN THE EVENING BECOMING SOUTH 5 TO 10 MPH AFTER MIDNIGHT.  
.SUNDAY...SUNNY AND WARMER. HIGHS 73 TO 78. SOUTH WIND AROUND 5 MPH IN THE MORNING BECOMING SOUTHWEST 5 TO 10 MPH IN THE AFTERNOON.  
.SUNDAY NIGHT...CLEAR. LOMS 42 TO 52. SOUTHWEST WIND 5 TO 10 MPH.  
.MONDAY...SUNNY. HIGHS 75 TO 80.  
.MONDAY NIGHT...CLEAR. LOMS IN THE LOWER 40S TO LOWER 50S.  
.TUESDAY...SUNNY. HIGHS IN THE UPPER 70S TO LOWER 80S.  
.TUESDAY NIGHT...CLEAR. LOMS IN THE MID 40S TO MID 50S.  
.WEDNESDAY...SUNNY. HIGHS IN THE LOWER TO MID 80S.  
.WEDNESDAY NIGHT...CLEAR. LOMS IN THE MID 40S TO MID 50S.  
.THURSDAY...SUNNY. HIGHS IN THE LOWER TO MID 80S.  
.THURSDAY NIGHT...CLEAR. LOMS IN THE MID 40S TO MID 50S.  
.FRIDAY...SUNNY. HIGHS IN THE LOWER TO MID 80S.

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CAZ030-121100-  
JOSHUA TREE NATIONAL PARK-  
INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...  
LOST HORSE  
907 PM PST FRI MAR 11 2016

...WIND ADVISORY IN EFFECT UNTIL 1 AM PST SATURDAY...

.TONIGHT...PARTLY CLOUDY IN THE EVENING...THEN BECOMING MOSTLY CLEAR. A SLIGHT CHANCE OF SHOWERS. WINDY AND COOLER. LOMS 42 TO 52. WEST WIND 20 TO 35 MPH. GUSTS UP TO 50 MPH. CHANCE OF MEASURABLE RAIN 10 PERCENT.  
.SATURDAY...SUNNY...BREEZY AND COOLER. HIGHS 64 TO 74. NORTHWEST WIND 10 TO 20 MPH. GUSTS UP TO 30 MPH IN THE MORNING.  
.SATURDAY NIGHT...CLEAR. LOMS 41 TO 51. WEST WIND 5 TO 15 MPH.  
.SUNDAY...MOSTLY SUNNY. HIGHS 67 TO 77. WEST WIND 5 TO 15 MPH.  
.SUNDAY NIGHT...MOSTLY CLEAR IN THE EVENING...THEN BECOMING PARTLY CLOUDY. LOMS 45 TO 55. WEST WIND 10 TO 20 MPH.  
.MONDAY...PARTLY SUNNY. HIGHS 70 TO 80.  
.MONDAY NIGHT...MOSTLY CLEAR. LOMS IN THE MID 40S TO MID 50S.  
.TUESDAY...MOSTLY SUNNY. HIGHS 70 TO 80.  
.TUESDAY NIGHT...CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.WEDNESDAY...SUNNY. HIGHS IN THE LOWER 70S TO LOWER 80S.  
.WEDNESDAY NIGHT...CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.THURSDAY...SUNNY. HIGHS IN THE LOWER 70S TO LOWER 80S.  
.THURSDAY NIGHT...CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.FRIDAY...SUNNY. HIGHS IN THE LOWER 70S TO LOWER 80S.

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CAZ032-121100-  
RIVERSIDE COUNTY/EASTERN DESERTS-  
INCLUDING THE CITIES OF...CHERTACO SUMMIT...DESERT CENTER...  
EAGLE MOUNTAIN  
907 PM PST FRI MAR 11 2016

...WIND ADVISORY IN EFFECT UNTIL 1 AM PST SATURDAY...

.TONIGHT...MOSTLY CLEAR AND WINDY. PATCHY BLOWING SAND AND BLOWING DUST IN THE EVENING. LOMS 45 TO 55. WEST WIND 20 TO 35 MPH. GUSTS UP TO 50 MPH.  
.SATURDAY...SUNNY AND COOLER. HIGHS 73 TO 78. WEST WIND 5 TO 15 MPH.  
.SATURDAY NIGHT...CLEAR. LOMS 42 TO 52. WEST WIND 5 TO 15 MPH.  
.SUNDAY...SUNNY. HIGHS 75 TO 80. SOUTHWEST WIND 5 TO 10 MPH.  
.SUNDAY NIGHT...MOSTLY CLEAR. LOMS 46 TO 56. WEST WIND 5 TO 15 MPH.  
.MONDAY...MOSTLY SUNNY. HIGHS IN THE UPPER 70S TO LOWER 80S.  
.MONDAY NIGHT...MOSTLY CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.TUESDAY...SUNNY. HIGHS IN THE LOWER TO MID 80S.  
.TUESDAY NIGHT...CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.WEDNESDAY...SUNNY. HIGHS IN THE LOWER TO MID 80S.  
.WEDNESDAY NIGHT...CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.THURSDAY...SUNNY. HIGHS IN THE MID TO UPPER 80S.  
.THURSDAY NIGHT...CLEAR. LOMS IN THE UPPER 40S TO UPPER 50S.  
.FRIDAY...SUNNY. HIGHS IN THE MID TO UPPER 80S.

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CAZ033-121100-  
**IMPERIAL COUNTY-**  
INCLUDING THE CITIES OF...BRANLEY...CALEXICO...EL CENTRO...GLAMIS...

**FIGURE A-12**  
**ZONE FORECAST FOR IMPERIAL COUNTY INCLUDED BLOWING DUST & SAND - PAGE 2**

**Fig A-12:** A Zone Forecast issued as late as 9:07 p.m. MST on March 12, 2016 for Imperial County warned of blowing dust and sand. Source: Iowa Environmental Mesonet;  
<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=ZFPPSR&e=201603120507>

### FIGURE A-13 WIND ADVISORY EXPANDED FOR SE CA AND SW ARIZONA

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f
692
MMUS75 KPSR 120507
NPWPSR

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE PHOENIX AZ
1007 PM MST FRI MAR 11 2016

AZZ020-025-CAZ031-120900-
/O.EXA.KPSR.WT.V.0003.000000T0000Z-160312T0900Z/
LOWER COLORADO RIVER VALLEY AZ-YUMA/MARTINEZ LAKE AND VICINITY-
LOWER COLORADO RIVER VALLEY CA-
INCLUDING THE CITIES OF...EHRENBERG...PARKER...
FORTUNA FOOTHILLS...SAN LUIS...SOMERTON...YUMA...BLYTHE
1007 PM MST FRI MAR 11 2016 /907 PM PST FRI MAR 11 2016/

...WIND ADVISORY IN EFFECT UNTIL 2 AM MST /1 AM PST/ SATURDAY
AND HAS BEEN EXPANDED TO COVER THE COLORADO RIVER VALLEY...
...

THE NATIONAL WEATHER SERVICE IN PHOENIX HAS ISSUED A WIND
ADVISORY...WHICH IS IN EFFECT UNTIL 2 AM MST /1 AM PST/ SATURDAY.

* AFFECTED AREA...SOUTHEAST CALIFORNIA...INCLUDING THE IMPERIAL
VALLEY...INTERSTATE 8 EAST OF THE CALIFORNIA MOUNTAINS...AND
INTERSTATE 10 FROM WEST OF BLYTHE TO THE COACHELLA VALLEY...AND A
LARGE PART OF THE COLORADO RIVER VALLEY FROM PARKER TO YUMA.

* TIMING...THROUGH FRIDAY EVENING.

* WINDS...SUSTAINED WEST WINDS OF 20 TO 35 MPH WITH GUSTS OVER
45 MPH.

* VISIBILITIES...BLOWING DUST WILL ALSO REDUCE VISIBILITIES AT
TIMES...POTENTIALLY TO BELOW ONE MILE...ESPECIALLY ACROSS
IMPERIAL COUNTY IN SOUTHEAST CALIFORNIA IMPACTING TRAVEL ON
INTERSTATE 8. REGIONAL AND LONG-RANGE VISIBILITIES...INCLUDING
LOCATIONS ALONG AND JUST EAST OF THE COLORADO RIVER VALLEY...
WILL BE DEGRADED DUE TO THE LOFTED DUST AND SAND.

* IMPACTS...DIFFICULT TRAVEL CONDITIONS DUE TO STRONG CROSSWINDS
ALONG NORTH-SOUTH ORIENTED ROADWAYS INCLUDING HIGHWAYS 78 AND
86 IN SOUTHEAST CALIFORNIA.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A WIND ADVISORY MEANS THAT SUSTAINED WIND SPEEDS OF BETWEEN
30 AND 40 MPH ARE EXPECTED...OR WIND GUSTS OF BETWEEN 40 AND
58 MPH. WINDS THIS STRONG CAN MAKE DRIVING DIFFICULT...ESPECIALLY
FOR HIGH PROFILE VEHICLES. IN ADDITION...STRONG WINDS OVER DESERT
AREAS COULD RESULT IN BRIEFLY LOWERED VISIBILITIES TO WELL UNDER
A MILE AT TIMES IN BLOWING DUST OR BLOWING SAND. USE EXTRA
CAUTION.

&&

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CAZ030-032-033-120900-
/O.CON.KPSR.WT.V.0003.000000T0000Z-160312T0900Z/
JOSHUA TREE NATIONAL PARK-RIVERSIDE COUNTY/EASTERN DESERTS-
IMPERIAL COUNTY-
INCLUDING THE CITIES OF...COTTONWOOD VISITOR CENTER...KEYS VIEW...
LOST HORSE...CHIRIACO SUMMIT...DESERT CENTER...EAGLE MOUNTAIN...
BRANLEY...CALEXICO...EL CENTRO...GLAMIS...IMPERIAL...
THE SALTON SEA
907 PM PST FRI MAR 11 2016

...WIND ADVISORY REMAINS IN EFFECT UNTIL 1 AM PST SATURDAY...

* AFFECTED AREA...SOUTHEAST CALIFORNIA...INCLUDING THE IMPERIAL
VALLEY...INTERSTATE 8 EAST OF THE CALIFORNIA MOUNTAINS...AND
INTERSTATE 10 FROM JUST WEST OF BLYTHE TO THE COACHELLA
VALLEY.

* TIMING...LATE FRIDAY AFTERNOON THROUGH FRIDAY EVENING.

* WINDS...SUSTAINED WEST WINDS OF 20 TO 35 MPH WITH GUSTS OVER

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**Fig A-13:** At 10:07 p.m. MST on March 11, 2016 the NWS expanded the Wind Advisory to include a wider area of southeastern California and portions of southwestern Arizona.

Source: Iowa Environmental Mesonet;

<https://mesonet.agron.iastate.edu/wx/afos/p.php?pil=NPWPSR&e=201603120507>

**FIGURE A-14**  
**BLOWING DUST/SAND IDENTIFIED OVER SOUTHEASTERN CALIFORNIA**

**Friday, March 11, 2016**

DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY  
THROUGH 0200Z March 12 2016

DUST

California:

An area of blowing dust/sand was observed near the Salton Sea in southern California. This area of blowing sand was seen moving eastward from Imperial county California into southwestern Arizona.

-Cronin

THIS TEXT PRODUCT IS PRIMARILY INTENDED TO DESCRIBE SIGNIFICANT AREAS OF SMOKE ASSOCIATED WITH ACTIVE FIRES AND SMOKE WHICH HAS BECOME DETACHED FROM THE FIRES AND DRIFTED SOME DISTANCE AWAY FROM THE SOURCE FIRE..TYPICALLY OVER THE COURSE OF ONE OR MORE DAYS. AREAS OF BLOWING DUST ARE ALSO DESCRIBED. USERS ARE ENCOURAGED TO VIEW A GRAPHIC DEPICTION OF THESE AND OTHER PLUMES WHICH ARE LESS EXTENSIVE AND STILL ATTACHED TO THE SOURCE FIRE IN VARIOUS GRAPHIC FORMATS ON OUR WEB SITE:

JPEG: <http://www.ospo.noaa.gov/Products/land/hms.html>

GIS: <http://www.firedetect.noaa.gov/viewer.htm>

KML: <http://www.ssd.noaa.gov/PS/FIRE/kml.html>

ANY QUESTIONS OR COMMENTS REGARDING THIS PRODUCT SHOULD BE SENT TO  
SSDFireTeam@noaa.gov

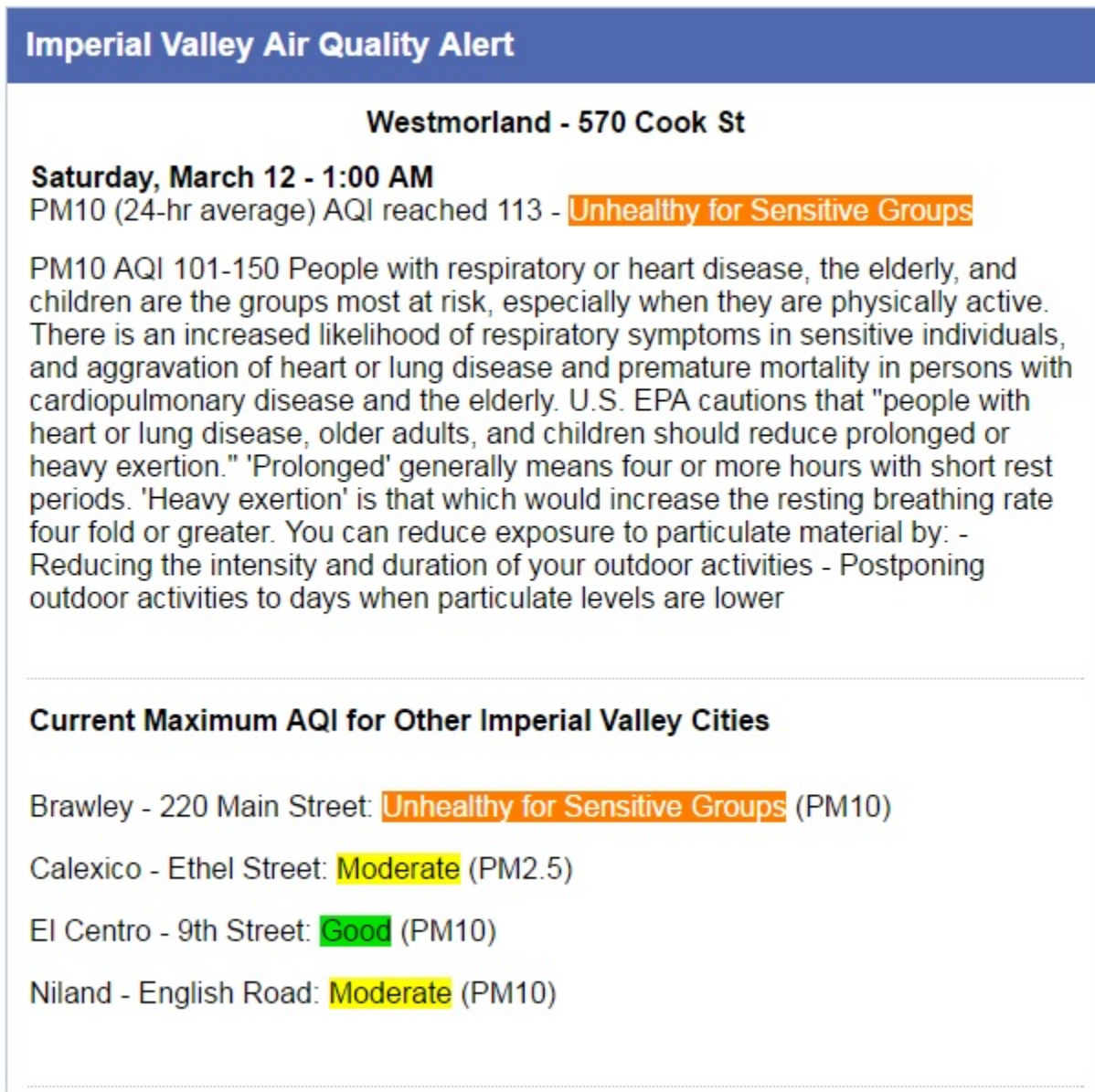
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**Unless otherwise indicated:**

- Areas of smoke are analyzed using GOES-EAST and GOES-WEST Visible satellite imagery.
- Only a general description of areas of smoke or significant smoke plumes will be analyzed.
- A quantitative assessment of the density/amount of particulate or the vertical distribution is not included.
- Widespread cloudiness may prevent the detection of smoke even from significant fires.

**Fig A-14:** NOAA'S Smoke Text Product identified blowing dust or sand in the vicinity of the Salton Sea on March 11, 2016. The notice was effective through 1800 PST. This was during the period that Brawley and Westmorland were recording significant levels of PM10

**FIGURE A-15**  
**AIR QUALITY ALERT – UNHEALTHY FOR SENSITIVE GROUPS**



**Fig A-15:** So much dust was stirred up by the high winds that the poor air quality carried into the following day, causing the ICAPCD to issue an air quality alert on its website at 1 a.m. on March 12, 2016, informing the public that air quality had entered the Unhealthy for Sensitive Groups range



**FIGURE A-16**  
**AIR QUALITY INDEX**

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health alert: everyone may experience more serious health effects.
Hazardous	301 to 500	Health warnings of emergency conditions. The entire population is more likely to be affected.

**Fig A-16:** The AQI is an index for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health effects might be a concern for you. The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air. EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, EPA has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country. Source:

<https://airnow.gov/index.cfm?action=aqibasics.aqi>

**FIGURE A-17**  
**NO BURN DAY DECLARED**

Imperial County Air Pollution Control District  
Daily Weather and Ag. Burning Information

Date: Friday March 11, 2016

Yesterday's Weather Observations at Imperial Airport (ASOS) FAA/NWS

LOCAL TIME	TEMP °F	WINDS MILES PER HOUR	VISIBILITY MILES
7 AM	57	W 5	10
8 AM	65	W 5	10
9 AM	77	W 3	10
10 AM	82	VRBL 6	10
11 AM	84	CALM	10
NOON	87	ESE 6	10
1 PM	89	VRBL 7	10
2 PM	89	VRBL 5	10
3 PM	90	E 8	10
4 PM	90	E 6	10
5 PM	87	E 5	10
6 PM	85	CALM	10
7 PM	77	CALM	10

Max. Temperature yesterday was 90 degrees

Today's Mt. Signal Visibility at 7:30 AM Clear NKX 12Z 500 MB Height \_\_\_\_\_  
1Y7 12Z 500 MB Height \_\_\_\_\_

**Forecasts**  
**High Today** 79-84

Local Forecast (Issued 8 AM Local)      Computer Forecast (RUC 40KM 12Z)

Est. Time Mixing Height reaches 3000 feet	_____	<b>11:00 am</b>
Forecast of Maximum Mixing Height	_____ feet	<b>8530</b> feet
Forecast for Morning surface winds	<b>S 5-10</b> mph	<b>S 5-10</b> mph
Forecast for afternoon surface winds	<b>SW 20-30/G 40</b> mph	_____ mph
Forecast for evening surface winds	<b>W 20-35</b> mph	_____ mph
Forecast 10 AM - 3 PM transport winds	<b>3-25</b> mph	_____ mph

Comments/Complaints: Air Show naval

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Burn Hours \_\_\_\_\_ ARB No Burn Day \_\_\_\_\_ District called No Burn Day XX

Total actually burned today \_\_\_\_\_ acres Crops burned \_\_\_\_\_

IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT 2011      Int WB

**Fig A-17:** A copy of the Imperial County Air Pollution Control District official record of the conditions as they existed for a determination of a "No Burn" day on March 11, 2016.  
Source: ICAPCD Archives

**FIGURE A-18**  
**IMPERIAL COUNTY AFFIDAVIT OF 30 DAY PUBLIC NOTICE**

**AFFIDAVIT OF PUBLICATION**  
**(2015.5 C.C.P.)**

**STATE OF CALIFORNIA**

County of Imperial

I am a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk\* of the printer of the

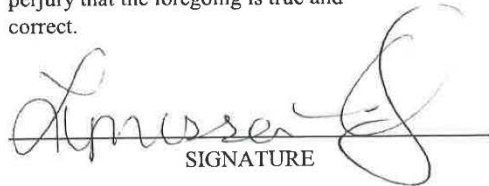
Imperial Valley Press

a newspaper of general circulation, printed and published daily in the City of El Centro, County of Imperial and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Imperial, State of California, under the date of October 9, 1951, Case Number 26775; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

01/10.

all in the year 2018

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

  
 SIGNATURE

Name of Account: I C AIR POLLUTION  
 CONTROL  
 Order Number: 11136200  
 Ad Number: 31356303

\* Printer, Foreman of the Printer, or Principal Clerk of the Printer

Date: 10 th day of January, 2018.  
 at El Centro, California.

This space is for the County Clerk's  
 Filing Stamp:

**NOTICE OF AVAILABILITY  
 OF THE DEMONSTRATION OF THE OCCURRENCE  
 OF 13 EXCEPTIONAL EVENTS (EE)**

The Imperial County Air Pollution Control District (Air District) has prepared 13 Draft Exceptional Event (EE) Demonstrations, which support the requested exclusion measured 24-hour concentrations at the Air District air monitoring sites. Listed below by date, site and concentration as measured by a Federal Reference Method monitor (FRM) or with a continuous Federal Equivalent Method monitor (FEM) represent the 13 Draft EE's.

2014	2016	2016
April 12 - 13 Niland Brawley	March 6 Brawley Westmorland	April 22 Westmorland Brawley
FEM 167.5 ug/m <sup>3</sup> FEM 166.8 ug/m <sup>3</sup>	FEM 237 ug/m <sup>3</sup> FEM 220 ug/m <sup>3</sup>	FEM 192 ug/m <sup>3</sup> FEM 242 ug/m <sup>3</sup>
April 25-26 Brawley Brawley	March 11 Brawley Westmorland	April 24-25 Brawley Brawley Westmorland Brawley Calexico Niland Westmorland
FEM 183.4 ug/m <sup>3</sup> FEM 313.3 ug/m <sup>3</sup>	FEM 178 ug/m <sup>3</sup> FEM 179 ug/m <sup>3</sup>	FEM 186 ug/m <sup>3</sup> FEM 218 ug/m <sup>3</sup> FEM 177 ug/m <sup>3</sup> FEM 285 ug/m <sup>3</sup> FEM 173 ug/m <sup>3</sup> FEM 225 ug/m <sup>3</sup> FEM 244 ug/m <sup>3</sup>
May 5-6 Brawley Brawley Westmorland Brawley	March 28 Brawley El Centro Niland Westmorland	May 5 Brawley Niland Westmorland
FRM 269 ug/m <sup>3</sup> FEM 222.5 ug/m <sup>3</sup> FEM 373 ug/m <sup>3</sup> FEM 439.3 ug/m <sup>3</sup>	FEM 334 ug/m <sup>3</sup> FEM 385 ug/m <sup>3</sup> FEM 334 ug/m <sup>3</sup> FEM 465 ug/m <sup>3</sup>	FEM 163 ug/m <sup>3</sup> FEM 172 ug/m <sup>3</sup> FEM 227 ug/m <sup>3</sup>
May 11 Niland	April 14 Niland Westmorland Brawley	May 15 Niland
FEM 172.8 ug/m <sup>3</sup>	FEM 172.8 ug/m <sup>3</sup> FEM 163 ug/m <sup>3</sup> FEM 228 ug/m <sup>3</sup>	FEM 216 ug/m <sup>3</sup>
June 30 Niland		
FEM 183.7 ug/m <sup>3</sup>		

The public and all interested parties are encouraged to review and comment on the 13 Draft EE's listed above. These demonstrations provide the supporting evidence that on the days indicated for 2014, 2015 and 2016 Air District air monitors were affected by entrained elevated levels of particulate matter of an aerodynamic size less than 10 microns (PM10). Winds, associated with a weather event entrained PM10 into the region affecting Riverside, Imperial and San Diego counties. The 13 Draft EE's provide the scientific justification for the requested exclusions. The Air District is soliciting and accepting comments for 30 days commencing the date of the publication of this notice. The final closing date for submitting comments is February 12, 2018 by close of business.

The 13 Draft EE's for days listed above are available for download at the Air District website: [www.co.imperial.ca.us](http://www.co.imperial.ca.us), under "Air Pollution". To view a hard copy of any of the 13 Draft EE's, please visit the Air Pollution Control District office at 150 S. 9th Street, El Centro. Should you have any questions or concerns please feel free to call our office between 8am and 5pm at (442) 265-1800 and ask for Monica N. Soucier.

L673 J10

**Fig A-18:** Is a copy of the Imperial County Air Pollution Control District official record (affidavit) affirming the publication of the notice of availability of the Exceptional Events Demonstration for March 11, 2016. The date for closing comments was February 12, 2018

**FIGURE A-19**  
**IMPERIAL COUNTY COMMENTS**  
**REGARDING THE MARCH 11, 2016 EE DEMONSTRATIONS**

The ICAPCD received no comment